

Argo-España

Parte de la estrategia global de observación del océano



**Report on Delayed Mode for Argo float WMO
1900276**

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**Delayed Mode Quality Control for Argo float
WMO 1900276**

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1 Introduction

The Delayed Mode Quality Control (DMQC) has been developed for float WMO 1900276 and delivered on 11/01/2018 to ifremer.

Transmission system	ARGOS
Transmission ID	40818 02412
Platform Model	APEX SBE APF8
Platform ID	
Sensors	
Sensores s/n	
Data Centre (Format Version)	IF (2.2)
Project Name	ARGO SPAIN
Data Centre (Format Version)	IF (2.2)
Project Name	ARGO SPAIN
Float Owner	
PI Name	Gregorio PARRILLA
Parking Depth (dbar)	
Profile depth (dbar)	2025
Number of Profiles	63
Status	Inactive
Deployment Date	22-Sep-2003 00:00:00
Deployment Position	Lat 20.00 Lon -23.52
Last Surfacing Date	13-Jun-2005 07:20:25
Deployed Position	Lat 23.92 Lon -59.85
Age (years)	1.7
Voltage (v)	14.7

Table 1. Technical information of the float.

A deep analysis could not be developed due to the lack of data. A total of 63 profiles were unsuccessfully developed and only the first one was anomalously reported. However, trajectory data was reported from the beginning to the end during 1.7 years. The 1900276 was the third float deployed on 22/09/2003 by Gregorio Parrilla as PI at the Instituto Español de Oceanografía since the beginning of ARGO España. There is no solid reason to explain the lack of data for 1900276. Battery pack reported values of 14.7 volts, more than enough to keep working.

Pressure surface offset and internal vacuum malfunction was reported. There is no clear information about the mounted sensors but since the float was deployed in 2003, it might be appropriate to consider the next information about pressure sensors: "Prior 2003, Druck company has rectified some issues and the sensors were thought to be very stable, that is, until a recent discovery of a significant number of sensors now appear to suffer from a 'microleak', whereby oil leaks from the inner sensor chamber through fine cracks in the seals at the back of the sensor."

Barker, P. M., J. R. Dunn, C. M. Domingues, and S. E. Wijffels, 2011: Pressure Sensor Drifts in Argo and Their Impacts. *Journal of Atmospheric and Oceanic Technology*, 28, 1036-1049, <http://dx.doi.org/10.1175/2011JTECHO831.1>

Anomalous profile (number 1) was detected during its initial analysis and discarded.

2 Salinity correction from the OW method

The following parameters has been set up for the Owens and Wong Objective Mapping Analysis method:

Config_max_casts	94
use_pv	NaN
scale_long_large	NaN
scale_lat_large	NaN
scale_long_small	NaN
scale_lat_small	NaN
scale_phi_small	NaN
scale_phi_large	NaN
scale_age	NaN
p_delta	NaN
p_exclude	NaN

Table 2. Owens and Wong Objective Mapping Analysis method parameters .

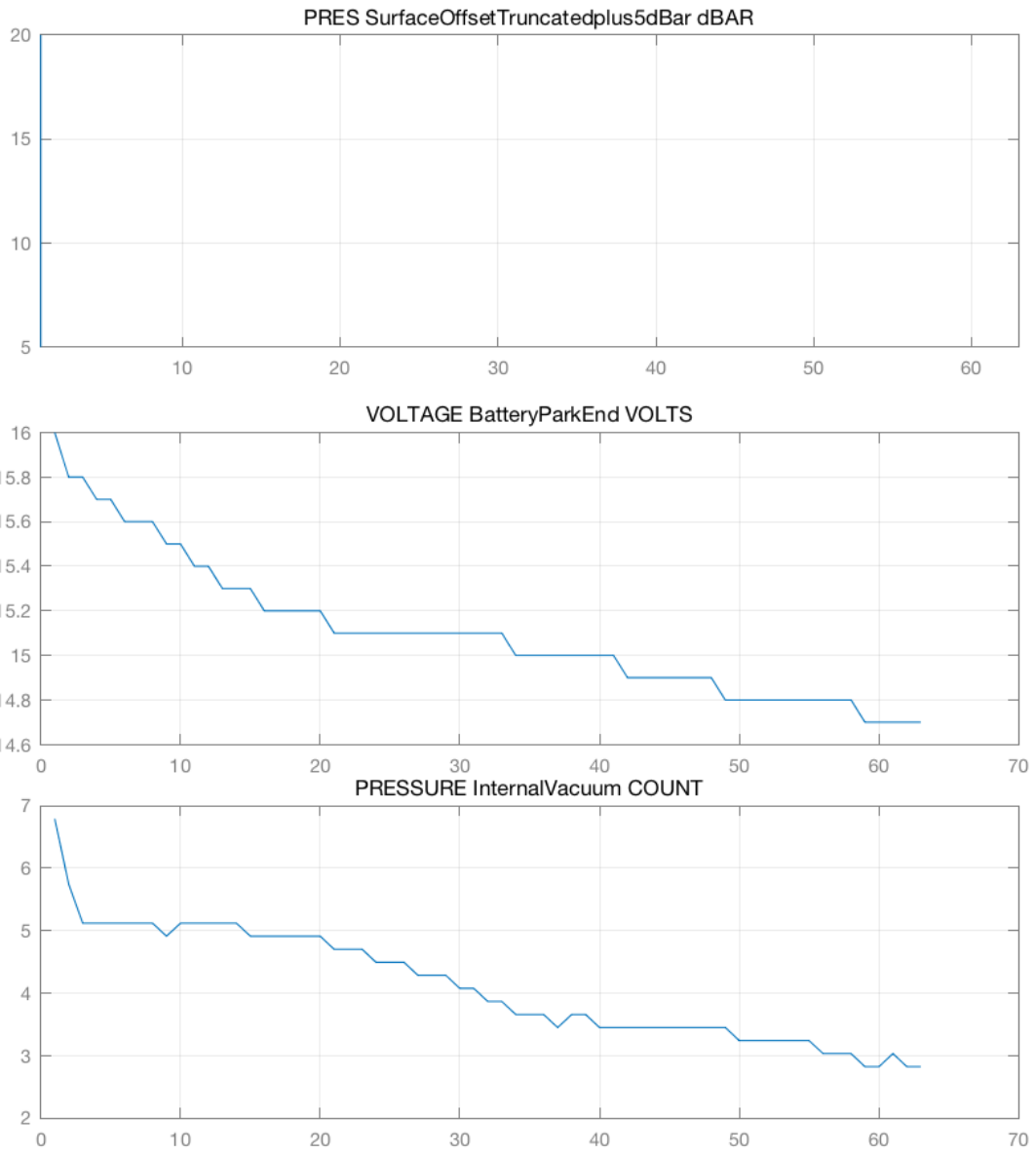


Figure 1: Pressure Surface OFFSET reported (a). Battery voltage (b). Pressure internal vacuum reported (c).

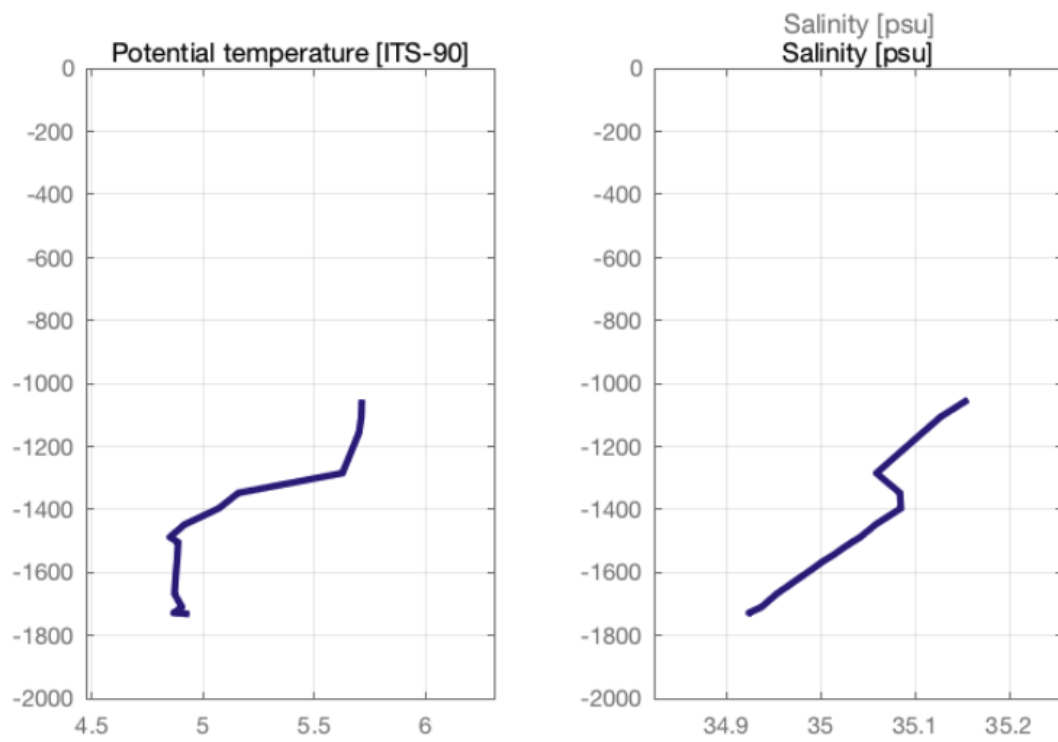


Figure 2: First anomalous profile reported.